Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-24. (canceled)
- 25. The conjugate of Claim 38 wherein in the PEG molecule is covalently attached to the hinge region of the antibody fragment.
 - 26-28. (canceled)
- 29. The conjugate of Claim 38 wherein said antigen binding site comprises the complementarity determining regions of Fig. 36 (SEQ ID NO: 56).
 - 30. (canceled)
 - 31. A composition comprising the conjugate of Claim 43 and a carrier.
 - 32. The composition of Claim 31 that is sterile.
- 33. The conjugate of Claim 38, wherein the covalent structure of the conjugate is free of any matter other than the antibody fragment and PEG that form the conjugate.
- 34. The conjugate of Claim 38, wherein the covalent structure of the conjugate incorporates one or more nonproteinaceous labels, and wherein the covalent structure of the conjugate is free of any matter other than the antibody fragment, PEG and nonproteinaceous label molecules that form the conjugate.
- 35. The conjugate of Claim 34 wherein at least one nonproteinaceous label is radiolabel.

36. A conjugate comprising a humanized antibody Fab' fragment, wherein said antibody fragment: (a) binds to human interleukin 8 (IL-8); (b) comprises the complementarity determining regions of (i) 6G4V11N35A light chain (Fig. 36, SEQ ID NO: 56) or (ii) 6G4V11N35E light chain (Fig. 45, SEQ ID NO: 62), and (c) is covalently attached to a single polyethylene glycol (PEG) molecule of at least 20 kD, and

wherein said conjugate has an apparent size of at least about 500 kD and at least about 8 fold greater than the apparent size of the antibody fragment.

37. A conjugate comprising a humanized antibody Fab' fragment, wherein said antibody fragment: (a) binds to human interleukin 8 (IL-8); (b) comprises the complementarity determining regions of (i) 6G4V11N35A light chain (Fig. 36, SEQ ID NO: 56) or (ii) 6G4V11N35E light chain (Fig. 45, SEQ ID NO: 62), and (c) is covalently attached to a polyethylene glycol (PEG) molecule having an average molecular weight of at least about 40 kD,

wherein the apparent size of the conjugate is at least about 500 kD, and at least about 8 fold greater than the apparent size of the antibody fragment.

38. A conjugate comprising a humanized antibody Fab' fragment further comprising an antigen binding site,

wherein said antigen binding site (a) binds to human interleukin-8 (IL-8), and (b) comprises the complementarity determining regions of; (i) 6G4V11N35A light chain (Fig. 36, SEQ ID NO: 56) or (ii) 6G4V11N35E light chain (Fig. 45, SEQ ID NO: 62),

wherein said humanized antibody Fab' fragment is covalently attached to a polyethylene glycol (PEG) molecule having an average molecular weight of at least 20 kD, and

wherein the apparent size of the conjugate is at least about 500 kD, and at least about 8 fold greater than the apparent size of the antibody fragment.

39. A composition comprising the conjugate of Claim 29 and a carrier.

- 40. The composition of Claim 39 that is sterile.
- 41. A composition comprising the conjugate of Claim 38 and a carrier.
- 42. The composition of Claim 41 that is sterile.
- 43. The conjugate of Claim 38 wherein said antigen binding site comprises the complementarity determining regions of Fig. 45 (SEQ ID NO: 62).